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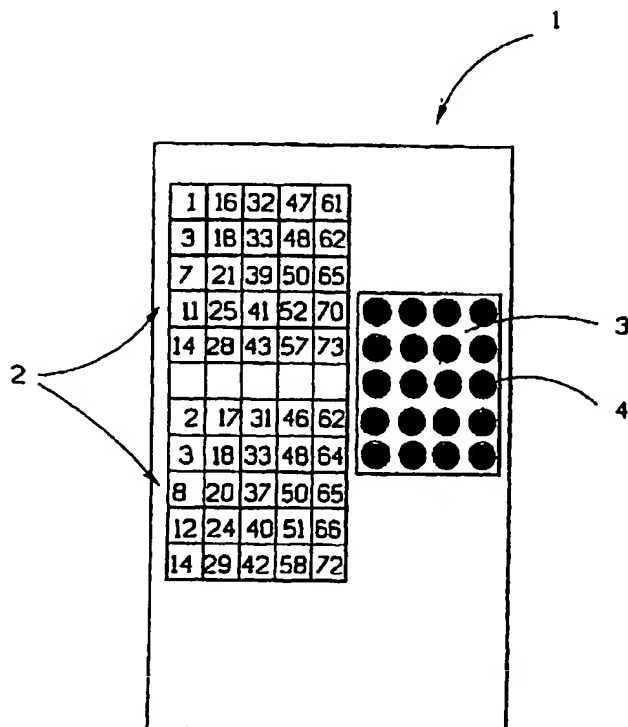
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(54) Title: METHOD FOR MANUFACTURING A SET OF LOTTERY TICKETS, METHOD FOR GENERATING A SET OF LOTTERY TICKETS HAVING A PREDETERMINED DIVIDEND, GAME ARRANGEMENT INCLUDING A DEVICE FOR GENERATING A SET OF LOTTERY TICKETS AND METHOD FOR A LOTTERY GAME



(57) Abstract: Method for manufacturing a set of lottery tickets comprising the following steps: applying at least one matrix with symbols on each lottery ticket to establish a bingo game field, the symbols in the matrix being selected at random from a particular set of symbols, and applying a called symbol field comprising a subset of the said set of symbols, a winning lottery ticket being identified by a particular pattern being generated when symbols from the said subset are marked on the said matrix; gaming arrangement comprising a device for generating a set of such lottery tickets; game comprising a set of such lottery tickets and method for lottery game with lottery tickets of the type comprising at least one bingo game field.

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**Method for manufacturing a set of lottery tickets, method for generating a set of lottery tickets having a predetermined dividend, game arrangement including a device for generating a set of lottery tickets and a method for a lottery game**

**TECHNICAL FIELD**

The present invention relates to a method for manufacturing a set of lottery tickets according to the preamble to claim 1, a method for generating a set of lottery tickets with particular winning plan according to the preamble to claim 2, gaming arrangement comprising a device for generating a set of lottery tickets according to the preamble to claim 3, a game according to the preamble to claim 4 and a method for a lottery game with lottery tickets of the type comprising at least one bingo game field consisting of a matrix with symbols selected from a particular set of symbols where one symbol is placed in each position in the matrix, and a called symbol field comprising a subset of the said set of symbols.

**BACKGROUND ART**

Lottery tickets of the type that comprise at least one bingo game field consisting of a matrix with symbols selected from a particular set of symbols, where one symbol is placed in each position in the matrix, are already known. In certain of the lottery tickets that have bingo game fields, a called symbol field comprising a subset of the said set of symbols is applied on the lottery ticket. The called symbol field can, where applicable, be covered by a thin layer of rubber that can be removed by scratching, whereupon the symbols in the called symbol field appear. In these games, a winning lottery ticket is identified, in accordance with a normal bingo game, by a particular pattern being generated when symbols from the said subset are marked on the said matrix.

This type of lottery ticket permits only a closed game, where by closed game is meant that the holder of the lottery ticket can determine whether or not he has won without external assistance. Closed games lack the possibility of extra entertainment that is made possible by an open game. By an open game is meant a game such that winners cannot determine

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completely which prize has been won or whether no prize has been won at all without external assistance. The external assistance means that drawing sequences are obtained via a medium other than the lottery ticket, for example via a TV program, radio program or a computer-based network such as the Internet. In the case when a TV or radio program is used, the game can advantageously be combined with other entertainment which increases the attractiveness of the lottery ticket.

#### DISCLOSURE OF INVENTION

An object of the invention is to provide a method for manufacturing a set of lottery tickets which makes possible both open and closed games. This object is achieved by a method for manufacturing a set of lottery tickets according to the characterizing part of claim 1. By generating a second subset of the said set of symbols, which second subset is common to the said set of lottery tickets, and which second set of symbols is intended to be applied on the said called symbol field after transmission via a medium separate to the lottery ticket, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found on the said called symbol field, a set of lottery tickets is obtained that makes possible both open and closed games.

A second object of the invention is to provide a method for generating a set of lottery tickets with particular winning plan that makes possible open and closed games. This object is achieved by a method for generating a set of lottery tickets with particular winning plan according to the characterizing part of claim 2. By generating a second subset of the said set of symbols, which second subset is common to the said set of lottery tickets and which second set of symbols is intended to be applied on the said called symbol field after transmission via a medium separate to the lottery ticket, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found on the said called symbol field, a set of lottery tickets is obtained that makes possible both open and closed games.

A third object of the invention is to provide a gaming arrangement comprising a device for generating a set of lottery tickets that makes possible open and closed games. This object is achieved by a device for generating a set of lottery tickets according to the characterizing part of

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claim 3. By virtue of the said gaming arrangement comprising a transmission unit, via which a second subset of the said set of symbols is transmitted, which second set of symbols is arranged to be applied on the said called symbol field, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found on the said called symbol field, both closed and open games are made possible.

A fourth object of the invention is to provide a game comprising a set of lottery tickets that makes possible both closed and open games. This object is achieved by a game comprising a set of lottery tickets, each of which comprises at least one bingo game field consisting of a matrix with symbols according to the characterizing part of claim 4. By virtue of the said game comprising a second subset of the said set of symbols, which second subset is common to the said set of lottery tickets and is intended to be applied on the said called symbol field, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found in the said called symbol field, both closed and open games are made possible.

A fifth object of the invention is to provide a method for a lottery game with lottery tickets of the type comprising at least one bingo game field that makes possible both closed and open games. This object is achieved by a method for a lottery game with lottery tickets of the type comprising at least one bingo game field according to claim 5. By generating and transmitting a second subset of the said set of symbols and thereafter identifying a winning lottery ticket by a particular number of symbols from the said second subset being found on the said called symbol field upon application of the said second subset on the said called symbol field, a lottery ticket is obtained with combined open and closed games.

#### DESCRIPTION OF DRAWINGS

The invention will be described in greater detail with reference to the attached drawings, in which

Figure 1 shows a lottery ticket according to the invention, with two matrices in the form of bingo game fields and a called symbol field with concealed numbers,

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Figure 2 shows the same lottery ticket with the called symbol field's numbers revealed by scratching, a thin covering layer having been removed,

Figure 3 shows the same lottery ticket in which numbers in the bingo game fields that correspond to numbers in the called symbol field have been marked,

Figure 4 shows schematically a method for manufacturing and generating a set of lottery tickets,

Figure 5 shows schematically a second method for manufacturing and generating a set of lottery tickets, and

Figure 6 shows a gaming arrangement comprising a device for generating a set of lottery tickets.

#### MODES FOR CARRYING OUT THE INVENTION

Figure 1 shows a lottery ticket 1 according to the invention. The lottery ticket consists preferably of a printed sheet of paper, but can, where applicable, be in electronic format and can be intended for games via a computer-based network. The lottery ticket 1 has two matrices 2 each of which corresponds to a bingo game field with 5\*5 positions. In the matrices 2 there is a symbol placed in each position in the matrix. The symbols are selected at random from a particular set of symbols. In the example shown, the symbols consist of the numbers 1 - 75, which are arranged in a known way so that the numbers 1 - 15 are found in the first column, the numbers 16 - 30 are found in the second column, the numbers 31 - 45 are found in the third column, the numbers 46 - 60 are found in the fourth column and the numbers 61 - 75 are found in the fifth column. The game can, of course, be designed with more or fewer columns and/or other symbols. In a common form of the game, a position in the matrix is also marked in advance, usually the one in the middle. The lottery ticket has also a called symbol field 3 which, according to the embodiment shown, is covered by a covering layer 4 which conceals the symbols until the covering layer is removed.

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Figure 2 shows the same lottery ticket with the covering layer 4 having been removed, revealing the symbols. In the example selected, the called symbol field has twenty symbols chosen at random from the particular set of symbols.

Figure 3 shows the same lottery ticket in which numbers in the bingo game fields that correspond to numbers in the called symbol field have been marked. In general, a winning lottery ticket is identified by a particular pattern being generated when symbols from the said called symbol field are marked in the said matrix. The particular pattern generally consists of a horizontal or vertical row, a diagonal line or a cross, but other patterns can, of course, be used to identify a winning lottery ticket.

Figure 4 shows schematically a method for manufacturing a set of lottery tickets. The method comprises a first step 10 in which a matrix with symbols is applied on each lottery ticket to establish a bingo game field. In the case when printed lottery tickets are used, this is carried out by printing or by the use of a printer. According to an embodiment of the invention, the printer obtains a set of symbols from a memory in which randomly generated sets of symbols are stored, or alternatively the set of symbols is generated directly by a random symbol generator without intermediate storage. The set of symbols is thereafter printed in the respective positions in the matrix. In the case where a lottery ticket in electronic form is used, the set of symbols is recreated in electronic form on a screen. The symbols in the matrix are selected at random from a particular set of symbols, which according to an embodiment of the invention consists of the numbers 1 - 75. In this case, the matrix is preferably designed as a field comprising 5\*5 positions.

In a second step 20, a called symbol field is applied, comprising a subset of the said particular set of symbols. The called symbol field is obtained from a second memory in which a set of called symbol fields is stored. The called symbol field comprises a randomly generated set of symbols selected from a particular set of symbols. The called symbol field is thereafter printed on the lottery ticket. In the case where a lottery ticket in electronic form on a screen. The symbols in the matrix are selected at random from a particular set of symbols, which according to an embodiment of the invention consists of the numbers 1 - 75. According to

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an embodiment, there are twenty numbers between 1 and 75 in the called symbol field.

In the case when the lottery ticket is not in electronic form, according to an embodiment of the invention, a covering layer that can be removed is applied onto the lottery ticket in a third step 30. The covering layer is applied in a way well known to experts in the field, for example by spraying a thin layer of rubber over the area where the called symbol field is printed. In the case when the lottery ticket is in electronic form, some other symbol, which is not included in the particular set of symbols, is written temporarily in the symbols' positions in the called symbol field, after which the symbols in the called symbol field are revealed when these positions are marked.

In a fourth step 40, a second subset of the said set of symbols is generated, which second subset is common to the said set of lottery tickets. The second subset is generated by a random symbol generator selecting at random a number of symbols from the particular set of symbols and storing the randomly selected subset in a third memory. According to an embodiment of the invention, ten numbers are selected between 1 and 75.

Figure 5 also shows steps that are incorporated in a method for generating a set of lottery tickets with a particular winning plan according to the invention. The method comprises a first step 50 in which a set of matrices with symbols that are selected at random from a particular set of symbols is generated. Thereafter, the generated set of matrices is applied in a second step 60. At least one matrix with symbols is applied onto each lottery ticket to establish a bingo game field. In a third step 70, a set of called symbol fields comprising a subset of the said set of symbols is generated. In addition, in a fourth step 80, there follows the application of at least one of the said called symbol fields on each lottery ticket.

In the case when the lottery ticket is not in electronic form, according to an embodiment of the invention, a covering layer that can be removed is applied onto the lottery ticket in a fifth step 90. The covering layer is applied in a way well known to experts in the field, for example by spraying a thin layer of rubber over the area where the called symbol field is printed. In the case when the lottery ticket is in electronic form, some other symbol, which is not included in the particular set of symbols, is written temporarily



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in the symbols' positions in the called symbol field, after which the symbols in the called symbol field are revealed when these positions are marked.

In a sixth step 100, a second subset of the said set of symbols is generated, which second subset is common to the said set of lottery tickets. The second subset is generated by a random symbol generator selecting at random a number of symbols from the particular set of symbols and storing the randomly selected subset in a third memory. According to an embodiment of the invention, ten numbers are selected between 1 and 75.

Figure 6 shows a gaming arrangement 101 comprising a device 102 for generating a set of lottery tickets, the said device comprising a first memory area 103 in which a set of symbols is stored. The device 102 comprises, in addition, a random symbol generator 104 which selects at random symbols from the said first memory area 103 and generates a set of matrices 105 which are stored in a second memory area 106. The random symbol generator 104 also generates a set of called symbol fields 107 comprising a subset of the said set of symbols. The called symbol fields are stored in a third memory area 108. In addition, the gaming arrangement 101 comprises an application tool 109 which is arranged to apply at least one bingo game field consisting of one of the said matrices and at least one called symbol field onto each lottery ticket in a set of lottery tickets 113. The random symbol generator 104 is further arranged to generate a second subset of the said set of symbols, which second subset is common to the said set of lottery tickets. The second subset is stored in a fourth memory area 110. The gaming arrangement 101 comprises, in addition, a transmission unit 111, via which the second subset of the said set of symbols stored in the fourth memory area 110 is arranged to be transmitted. The transmitted second subset is arranged to be received by a receiving unit.

The methods described above and the arrangement described above are arranged to make possible a game comprising a set of lottery tickets 113, each comprising at least one bingo game field 2 consisting of a matrix with symbols selected from a particular set of symbols. In a preferred embodiment, a symbol is placed at each position in the matrix. In addition, the lottery ticket 1 also comprises a called symbol field 3 comprising a subset of the said set of symbols. In the game, a winning lottery ticket 1 is

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identified by a particular pattern being generated when symbols from the called symbol field 3 are marked on the said matrix 2. The game comprises a second subset 110 of the said set of symbols, which second subset is common to the said set of lottery tickets 113 and is intended to be applied on the said called symbol field 3, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found in the said called symbol field.

The invention also relates to a method for a lottery game with lottery tickets of the type comprising at least one bingo game field consisting of a matrix 2 with symbols selected from a particular set of symbols 103. In one embodiment of the method, a symbol is placed at each position in the matrix in an alternative embodiment, one or more positions can be left empty, for example already marked with a cross. The lottery ticket also comprises a called symbol field 3 comprising a subset of the said set of symbols. According to the invention, the method comprises the following steps:

- In a first step, a winning lottery ticket is identified by a particular pattern being generated when symbols from the said subset are marked on the said matrix. For example, a horizontal or vertical row, a diagonal line or a cross can generate a winning field.
- In a second step, a second subset of the said set of symbols is generated and transmitted, preferably via a channel of communication 111, 112.
- In a third step, a winning lottery ticket is identified by a particular number of symbols from the said second subset being found in the said called symbol field when applying the said second subset onto the said called symbol field.

The invention is not limited to the embodiments described above, but can be varied freely within the framework of the subsequent patent claims.

## CLAIMS

1. Method for manufacturing a set of lottery tickets comprising the following steps: applying at least one matrix with symbols onto each lottery ticket to establish a bingo game field, the symbols in the matrix being selected at random from a particular set of symbols, and applying a called symbol field comprising a subset of the said set of symbols, a winning lottery ticket being arranged to be identified by a particular pattern being generated when symbols from the said called symbol field are marked on the said matrix, characterized in that a second subset of the said set of symbols is generated, which second subset is common to the said set of lottery tickets, which second set of symbols is intended to be applied on the said called number field after transmission via a medium separate to the lottery ticket, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found on the said called symbol field.
2. Method for generating a set of lottery tickets with particular winning plan comprising the following steps: generating a set of matrices with symbols that are selected at random from a particular set of symbols, applying at least one matrix with symbols onto each lottery ticket to establish a bingo game field, generating a set of called symbol fields comprising a subset of the said set of symbols, which when applied on the said set of matrices generates prizes according to a particular winning plan, applying at least one of the said called symbol fields onto each lottery ticket, a winning lottery ticket being arranged to be identified by a particular pattern being generated when symbols from the said subset are marked on the said matrix, characterized in that a second subset of the said set of symbols is generated, which second subset is common to the said set of lottery tickets and which second subset is intended to be applied on the said set of called symbol fields, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found on the said called symbol field.
3. Gaming arrangement comprising a device for generating a set of lottery tickets, the said device comprising a first memory area in which a set of symbols is stored, a random symbol generator which selects at random symbols from the said first memory area and generates a set of matrices which are stored in a second memory area, and also a set of

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called symbol fields comprising a subset of the said set of symbols, an application tool which is arranged to apply at least one bingo game field consisting of one of the said matrices and at least one called symbol field onto each lottery ticket, a winning lottery ticket being arranged to be identified by a particular pattern being generated when symbols from the said called symbol field are marked on the said matrix, characterized in that the said random symbol generator is arranged to generate a second subset of the said set of symbols, which second subset is common to the said set of lottery tickets, the said gaming arrangement comprises a transmission unit, via which the second subset of the said set of symbols is transmitted, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found on the said called symbol field when the said second subset is applied on the said called symbol field.

4. Game comprising a set of lottery tickets, each comprising at least one bingo game field consisting of a matrix with symbols selected from a particular set of symbols and a called symbol field comprising a subset of the said set of symbols, a winning lottery ticket being arranged to be identified by a particular pattern being generated when symbols from the said subset are marked on the said matrix, characterized in that the said game comprises a second subset of the said set of symbols, which second subset is common to the said set of lottery tickets and which is intended to be applied on the said called symbol field, a winning lottery ticket being identified by a particular number of symbols from the said second subset being found on the said called symbol field.

5. Method for lottery game with lottery tickets of the type comprising at least one bingo game field consisting of a matrix with symbols selected from a particular set of symbols where one symbol is placed in each position in the matrix, and a called symbol field comprising a subset of the said set of symbols, where the said method comprises the following steps:

- identification of a winning lottery ticket by generation of a particular pattern when symbols from the said subset are marked on the said matrix,
- generation and transmission of a second subset of the said set of symbols,
- identification of a winning lottery ticket by a particular number of symbols from the said second subset being found on the said called symbol field when the said second subset is applied on the said called symbol field.

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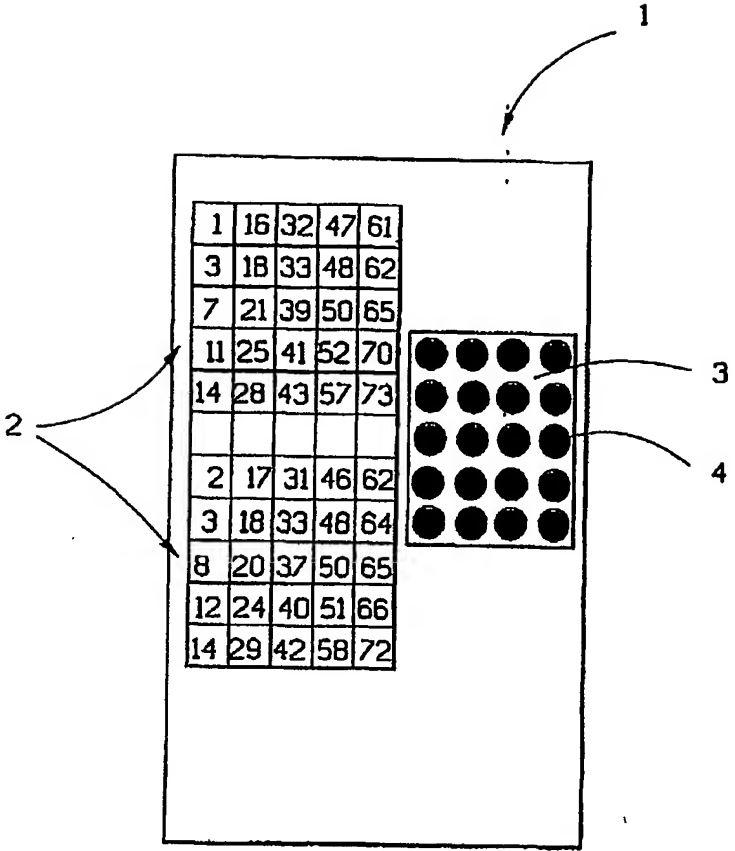


FIG.1

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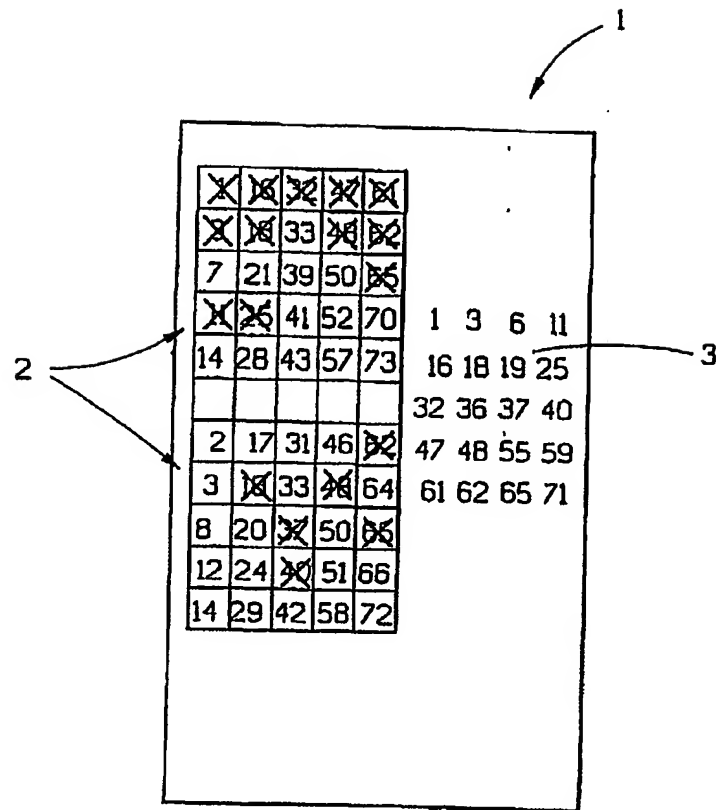
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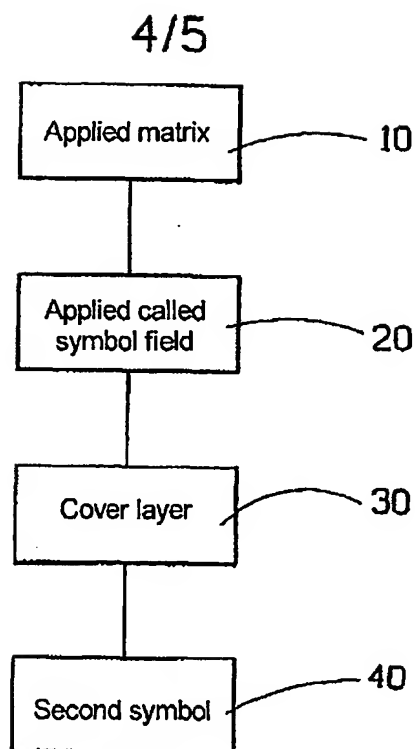
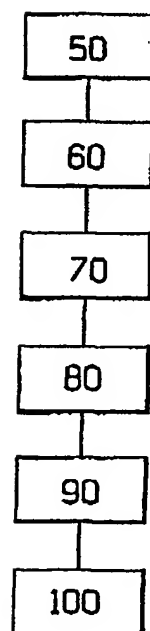
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| 3  | 18 | 33 | 48 | 62 |
| 7  | 21 | 39 | 50 | 65 |
| 11 | 25 | 41 | 52 | 70 |
| 14 | 28 | 43 | 57 | 73 |
|    |    |    |    |    |
| 2  | 17 | 31 | 46 | 62 |
| 3  | 18 | 33 | 48 | 64 |
| 8  | 20 | 37 | 50 | 65 |
| 12 | 24 | 40 | 51 | 66 |
| 14 | 29 | 42 | 58 | 72 |

|    |    |    |    |
|----|----|----|----|
| 1  | 3  | 6  | 11 |
| 16 | 18 | 19 | 25 |
| 32 | 36 | 37 | 40 |
| 47 | 48 | 55 | 59 |
| 61 | 62 | 65 | 71 |

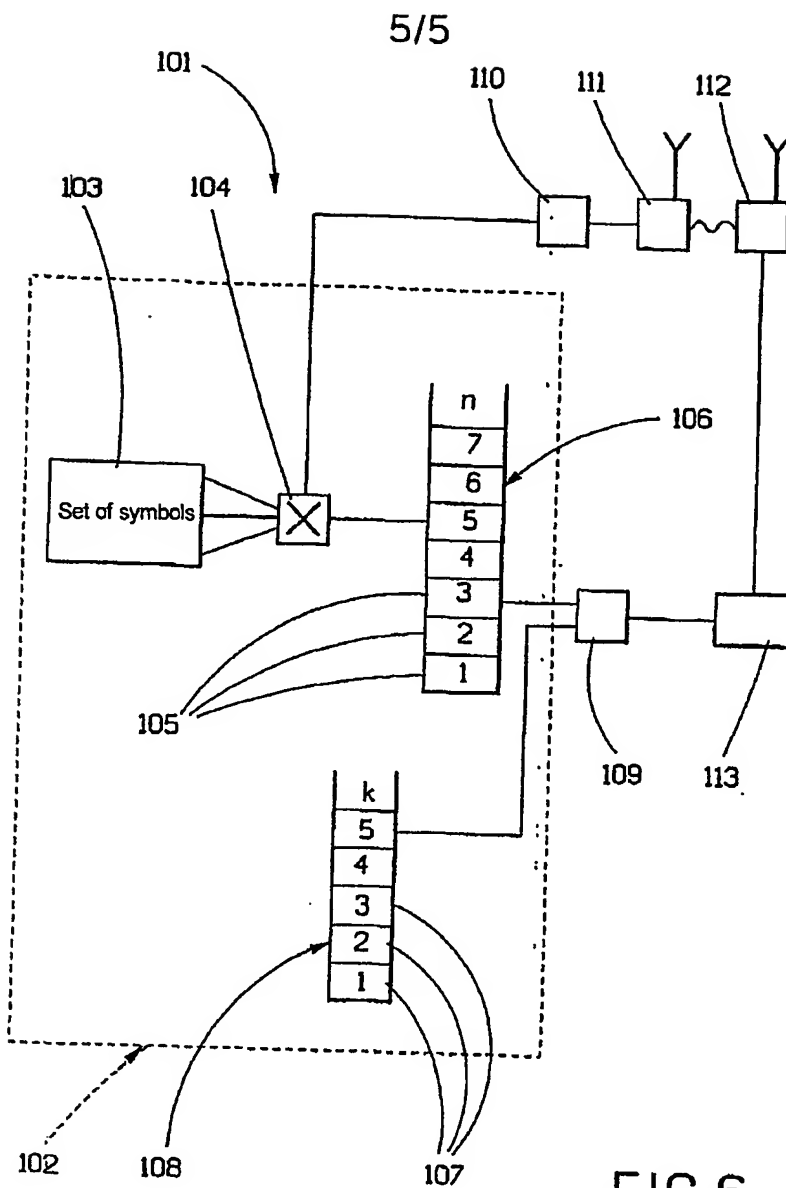
FIG.2

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FIG.3

FIG. 4FIG. 5



FIG. 6

## INTERNATIONAL SEARCH REPORT

International application No.

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| <b>A. CLASSIFICATION OF SUBJECT MATTER</b>   |   |   |
|--|---|---|
| IPC7: A63F 3/06, G07C 15/00<br>According to International Patent Classification (IPC) or to both national classification and IPC   |   |   |
| <b>B. FIELDS SEARCHED</b>  |   |   |
| Minimum documentation searched (classification system followed by classification symbols)  |   |   |
| IPC7: A63F, G07C   |   |   |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  |   |   |
| SE,DK,FI,NO classes as above   |   |   |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)   |   |   |
| EPO-INTERNAL, WPI DATA   |   |   |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>  |   |   |
| Category*  | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.   |
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| <input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.   |   |   |
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